

REMARKS

Summary

Claims 1-24 were pending. Claims 1-13 are drawn to a wheel system, classified in class 305, subclass 1. Claims 14-22 are drawn to a method for utilizing a wheel system, classified in class 280, subclass 5.26. Claims 23 and 24 are drawn to a method for making a wheel system, classified in class 164, subclass 1. Since there are three grouping of claims, which as stated by the Examiner are distinct, the Applicants have elected to pursue Claims 1-13 and withdraw Claims 14-24. Applicants reserve the right to traverse and pursue divisional applications based on Claims 14-24.

With respect to the specification, paragraphs [0023], [0024] and [0027] have been amended to correct minor editorial problems. The new paragraph [0023.1] added after paragraph [0023] describes the devices on page 5, lines 3-6.

For the claims, Claims 6, 7, 10, 12 and 13 remain in this application. Claims 1, 9 and 11 have been amended. Claims 2-5 and 8 have been canceled. Claims 25-32 have been added. Claims 14-24 have been withdrawn. The amendments to the claims are supported in the specification. No new matter has been added.

In the Drawings

The Examiner objected to pages 5, 6 and 7. The Applicants have submitted the correct drawings of FIG.3 and new drawing in Fig. 14. FIG. 3 includes markings for curvature portions 127a, 127b, 127c and 127d to show that they have an angle in the range of 0 to 75 degrees.

FIG. 14 includes vehicles with wheel systems as depicted on page 5, lines 3-9. With respect to the vehicle utilizing, one, three, four, or more wheel systems on page 5 lines 10-13, the Applicants have amended this description in the specification as shown above. Further, the Applicants have described the center of gravity description in paragraph 27, page 6 lines 13-19. Thus, in view of the corrected description, amended FIG. 3 and new FIG. 14 the objections to the drawing should be withdrawn and the drawings should be allowed. No new matter has been added. Applicants will submit formal drawings once the Examiner has approved the corrected drawings.

Objection to Abstract of the Disclosure

The Applicants have amended the Abstract of the Disclosure as shown above. Thus, the objection to the Abstract of the Disclosure should be withdrawn. Applicant respectfully requests the Examiner to withdraw this objection.

Rejection of Claims

35 U.S.C. § 112

Examiner has rejected Claims 1 and 11 under 35 U.S.C. § 112, 1st paragraph as failing to comply with the enablement requirement. The Applicants have amended Claims 1 and 11 to correct this problem with the claims so this rejection should be removed and these claims allowed. Applicants respectfully requests the Examiner withdraw this rejection.

Also, the Examiner has rejected Claims 1-13 under 35 U.S.C. § 112, 2nd paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The Applicants have amended Claims 1 and 11 to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention so this rejection should be withdrawn and these claims allowed. Since Claims 6-7, 9, 10, and 12 are dependent on Claims 1 and 11 these claims should also be allowed. Applicants respectfully request the Examiner to withdraw this rejection.

35 U.S.C. § 102

In the Office Action, the Examiner rejected Claims 1, 7, 9, 10 and 11 under 35 U.S.C. §102(b) as being anticipated by Sawada (U.S. Patent No. 6,431,664) and the Examiner rejected Claims 1, 7, 9, 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by Gross (U.S. Patent No. 3,698,501). Also, the Examiner rejected Claims 1 and 11 under 35 U.S.C. § 102(b) as being anticipated by Barron (U.S. Patent No. 5,720,529) and The Examiner rejected Claims 1, 6, 7, 9, 10 and 11 as being anticipated by Decelles et al. (U.S. Patent No. 4,790,548).

Applicants have amended Claims 1 and 11 and submit that Claims 1 and 11 are patentable over the references cited by the Examiner. Applicants respectfully traverse this rejection.

Amended Claim 1 recites, “wherein the curvature portions include indentations; and wherein said curvature portions are formed from an arc of an eleven-inch diameter circle, wherein said curvature portion has a center of gravity that is offset at six inches from the plurality of wheels to a center of the wheel system.”

Amended Claim 11 recites, “the base having a center of gravity, wherein the center of gravity enables the plurality of wheels to be moved with less energy; and a brake lever connected to the base, wherein the brake lever is configured to prevent the wheel system from moving in any direction.”

Thus, the structure in Claim 1 provides curvature portions with indentations and the curvature portions are formed from an arc of an eleven-inch diameter circle and the curvature portion has a center of gravity that is offset at six inches from the plurality of wheels to the wheel system. Also, Claim 11 provides a brake lever connected to a base of the wheel system, where the brake lever is configured to prevent the wheel system from moving in any direction. (Specification, page 8, lines 11-20 and page 9, lines 5-22).

Sawada discloses a wheel of the first aspect where each guiding surface is concaved in an arc-like shape. (Column 3, lines 7-10). However, Sawada does not anticipate, suggest or disclose that the concaved arc-like shape are formed from an arc of an eleven-inch diameter circle where the arc-like shape is

offset at six inches from a plurality of wheels of the wheel or a wheel system. In contrast to the present invention, Sawada does not disclose that the wheel has a base that is connected to a brake lever that prevents the wheel from moving in any direction.

Gross discloses a group of wheels at each side of a dolly frame arranged about a common axis, each group being operable about the axis of an electric drive and each wheel of each group being rotatable about its own axis, but capable of being locked against forward rotation when required. (Abstract). However, Gross does not anticipate, suggest or disclose that the wheels of the invention have an arc-like shape formed from an arc of an eleven-inch diameter circle where the arc-like shape is offset at six inches from a plurality of wheels of the wheel or a wheel system. Further, in contrast to the present invention Gross does not disclose that the wheel has a base that is connected to a brake lever that prevents the wheel from moving in any direction. Gross only provides that “each wheel is provided with one directional locking means to prevent the wheel from rotating in a forward direction”, but it does not provide a simple wheel system that can be applied to various vehicles, where the wheels can be prevented from moving in a backward direction, forward direction or any other direction. (Column 1, lines 54-58).

Barron discloses a wheel for inline roller skates to allow oblique and lateral movements of a roller skate wheel. (Column 1, lines 60-65). However, Barron does not anticipate, suggest or disclose that the roller skate wheel includes an arc-like shape that is formed from an arc of an eleven-inch diameter

circle where the arc-like shape is offset at six inches from a plurality of wheels of the wheel or a wheel system. Further, in contrast to the present invention Barron does not disclose that the roller skate wheel has a base that is connected to a brake lever that prevents the roller skate wheel from moving in any direction.

Decelles et al. discloses a stair-climbing vehicle that is completely safe and smooth, while climbing or descending stairs. (Column 1, lines 23-27). This vehicle includes a pair of laterally-spaced identical free spiders that have three rotatable wheels. (Column 1, lines 65-68 and Column 2, lines 1-3). However, Decelles et al. does not anticipate, suggest or disclose that the spiders include an arc-like shape that is formed from an arc of an eleven-inch diameter circle where the arc-like shape is offset at six inches from a plurality of wheels of the wheel or a wheel system. Decelles et al. states that the spiders are formed of an inner plate 15 and a parallel plate 16 both being of a generally square shape, having concavely-curved sides and convexly curved corners, but Decelles et al. does not state that the arc-like shape is offset at six inches from a plurality of wheels of the spider or wheel system. Further, in contrast to the present invention Decelles et al. does not disclose that the spider separate from the stair climbing device includes a base that is connected to a brake lever that prevents the spider or wheel from moving in any direction.

For the foregoing reasons, Claims 1 and 11 as amended are not anticipated by Sawada, Gross, Barron and Decelles et al. Claims 7, 9 and 10 depend from independent Claim 1. Therefore, Claims 6, 7, 9 and 10 are also not anticipated by Sawada, Gross, Barron and Decelles et al. as claims dependent

upon an allowable base claim. Applicants requests the Examiner to withdraw the rejections of Claims 1, 6, 7, 9, 10 and 11 as amended.

35 U.S.C. § 103

In the Office Action, the Examiner rejected Claims 2, 3, 4, 8, 12 and 13 under 35 U.S.C. §103(a) as being unpatentable over Decelles et al. (U.S. Patent No. 4, 790,548). Applicants have amended Claims 1 and 11 and submits that Claims 1 and 11 are patentable over the reference cited by the Examiner. Applicant respectfully traverses this rejection.

Since Claims 2, 3, 4, 8, 12 and 13 are dependent on patentable amended Claims 1 and 11, Claims 1 and 11 should also be patentable based on amended Claims 1 and 11 for the reasons stated above because the arguments above overcome the Examiner's rejections. Applicants request the Examiner to withdraw the rejections of Claims 2, 3, 4, 8, 12 and 13 as amended.

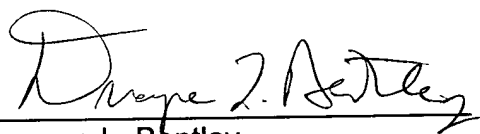
New Claims

Applicants have added new Claims 25-32. The specification supports the addition of the new claims. (Specification, page 8, lines 11-29, page 9, lines 5-21, and page 10, lines 14-28). No new matter has been added. Applicants respectfully request the Examiner to consider and allow the new claims.

Conclusion

Pending Claims 1, 6, 7, 9, 11-13 as amended and New Claims 25-32 are patentable. Therefore, in view of the above amendments, Applicants respectfully submit that this application is in condition for allowance and such action is earnestly requested. If for any reason, however, the Examiner feels that a telephone interview would be helpful in resolving any remaining issues the Examiner is respectfully requested to contact Applicants' undersigned attorney.

Respectfully submitted,

A handwritten signature in cursive script, reading "Dwayne L. Bentley", written over a horizontal line.

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Amendments to the Drawings

The attached sheets of drawings include changes to FIG. 3 and a new FIG. 14. The attached sheet for FIG.3, includes markings for curvature portions 127a, 127b, 127c and 127d to show that they have an angle in the range of 0 to 75 degrees. In addition, this attached sheet for FIG.3 replaces the original sheet including FIG. 3. For the next attached sheet of drawing it includes a new FIG. 14, which discloses rectangular boxes with wheel systems as described on page 5, lines 3-9.

Attachment: Replacement Sheets
Annotated Sheet Showing Changes



Appl No. 10/692, 262
Amdt Dated June 6, 2005
Reply to Office Action of February 16, 2005
Annotated Sheet Showing Changes

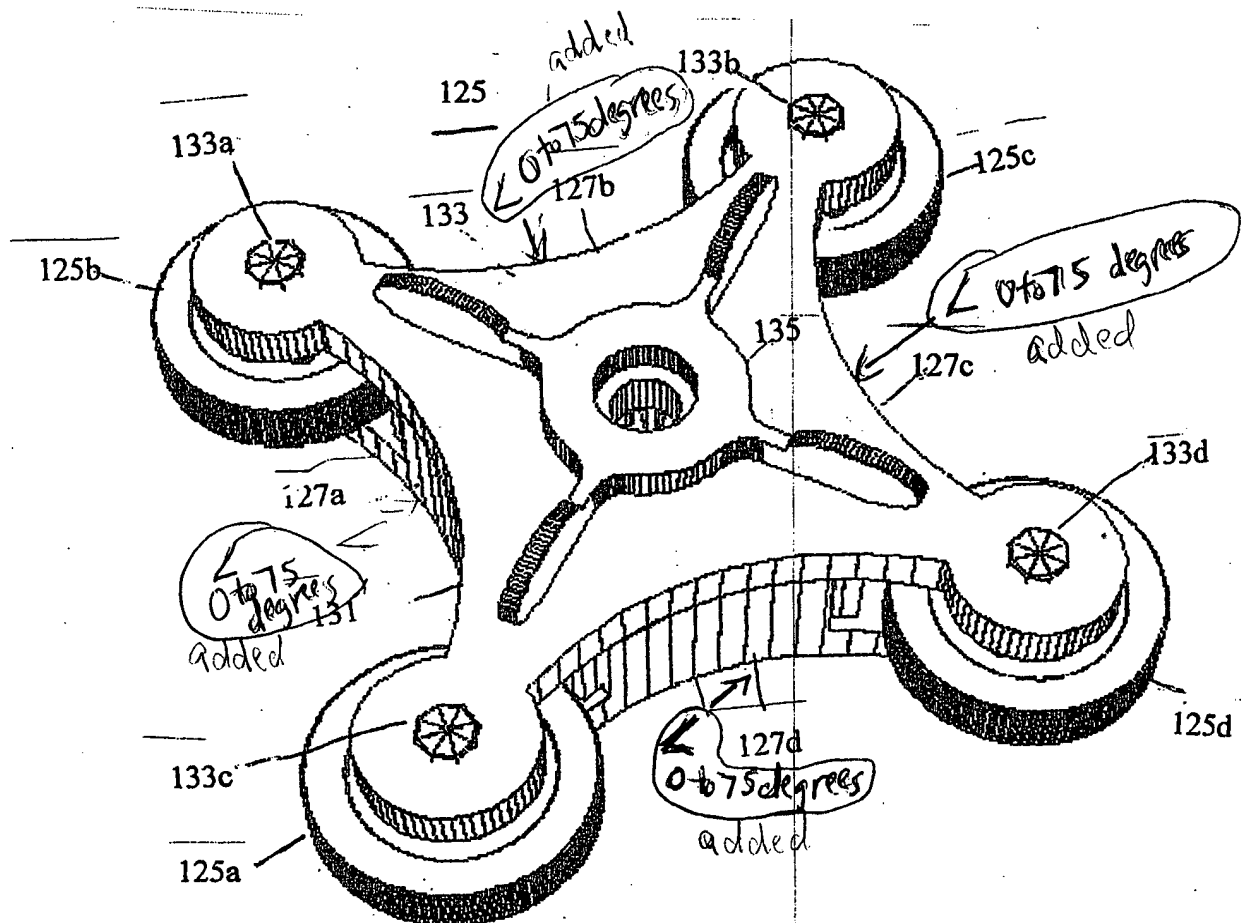


FIG. 3